



# BASSANI MEDICAL

PREMIER CULTIVATORS OF MEDICINAL CANNABIS

SAHPRA LICENSED · GMP & GACP CERTIFIED · CUMCS CERTIFIED

## **BASSANI MEDICAL**

- ✓ Our focus is to supply global pharmaceutical companies with highest quality product.
- ✓ A commitment to succeed and our passion for this fascinating plant will result in Bassani Medical's products becoming sought after commodities globally.

## A QUALITY CROP

The Bassani Medical brand is synonymous with professionalism and competence.

Our brand values of commitment, integrity and respect shape our attitudes, behaviour, and processes. We believe they closely reflect the values of our clients and partners in the pharmaceutical cannabis sector.

API EXTRACTS • BIOMASS • FLOWER



## DREAM TEAM



[michael@bassanimedical.com](mailto:michael@bassanimedical.com)

### **Michael Stringer** Chief Executive Officer

Michael is an innovative and accomplished pharmaceutical executive and is renowned for uncovering opportunities that inspire aggressive growth. His 26 years in the industry includes lead executive portfolios such as the CEO and MD of Fine Chemicals Corporation, among others. He also enjoyed a successful stint managing his own business interests.

International exposure in the USA, Europe and China has given Michael a firm grasp of global and industry nuances, with experience in sales, manufacturing, laboratory, supply chain management, quality management, and strategic business management.

*Michael has an MBA from the University of Cumbria (Wales, UK), has completed an Executive Leadership Programme (University of Cape Town) and Harvard Business School's Leadership Development programme.*

Michael brings the essential API experience, regulatory, technical expertise, and business development knowledge to Bassani Medical.

## DREAM TEAM



[renske@bassanimedical.com](mailto:renske@bassanimedical.com)

### **Dr Renske Snyman** Technical & Operations Director

Renske is a versed individual with powerful business, chemical, operational, and consulting skills which were developed over 25 years. She is experienced in manufacturing and operations management (MOM), process development, process optimization and business development. She has a comprehensive understanding of the pharmaceutical industry and the manufacturing of active pharmaceutical ingredients (APIs) under cGMP conditions. While the pharmaceutical sector is Renske's primary focus area, she is also accomplished in the plastics and LED lighting arenas.

*Renske's business qualifications include an MBA (University of Stellenbosch) and a BCom (Marketing and Accounting) degree from UNISA (University of South Africa).*

*Her technical qualifications include PhD (Organic Synthetic Chemistry) from University of Pretoria; MSc (Organic Chemistry), BSc. Hons (Chemistry) and BSc degrees from Rand Afrikaans University, and Adv. Dip. Illum. Eng. (cum laude) (BHA School of Lighting, Cape Town).*

*She has also completed courses in Prince 2 Practitioner – Project Management, ISO 9001: 2000 Registered Internal and Supplier Auditor; GMP for Food, Biotech and Pharmaceutical Engineering; OHS Act, and Forex Trading.*

## DREAM TEAM



**Johann Kruger**  
Responsible Pharmacist &  
QA Manager

*Johann is a highly astute, qualified and multi skilled Pharmaceutical Industry Management Professional with a versatile career spanning of 8 years. Johann has worked in various industry roles having started out as a Holiday Student Worker and Pharmacist Intern respectively.*

*He holds MBA, M.Sc Pharmaceutical Chemistry (cum Laude) and B.Pharm (cum laude).*

*He excelled in the roles and grew along industry ranks becoming a Pharmacist in Charge, Pharmacist, Quality Assurance Pharmacist, Quality Assurance Manager and Responsible Pharmacist.*

[johann@bassanimedical.com](mailto:johann@bassanimedical.com)

## SPECIALIST PARTNERS IN EXCELLENCE



### GreenZone

GreenZone was established in South Africa in 1992 with the purpose of manufacturing and distributing multi-span greenhouses to the local horticultural sector. GreenZone is one of the leading greenhouse suppliers in South Africa with a successful track record in South Africa and globally. GreenZone has also become a prominent importer of agricultural equipment into South Africa and neighbouring countries.

[greenzone.co.za](http://greenzone.co.za)



### AEssenseGrows

AEssenseGrows was founded on solving three 21st century issues: the need for high growth yields for a growing population, food safety, and conservation of resources.

To attain these goals, AEssenseGrows had to re-invent the entire process of agriculture down to its purest “essence”. AEssenseGrows created the AETrium series, accelerated plant growth platforms and software delivering pure, zero pesticide, year-round, enriched growth. This is the safest, cleanest, and most sustainable food & medicinal production available.

The AETrium Hydroponic Grow Systems Aeroponics Delivers 40% Faster Growth Year-Round. The AETrium hydroponic grow systems enable commercial cultivators to manage advanced aeroponic systems for indoor clean rooms or large greenhouses with precision sensor automation and accurate mechanical control.

[aessensegrows.com/en/cultivation](http://aessensegrows.com/en/cultivation)

## MADE FOR VOLUME & QUALITY

### Utilities

Utilities to support our growing and cGMP facilities are provided from centralised equipment.

#### Climate control

Supra Computer to control all elements pertaining to climate control, and include the following:

- ✓ Pad and Fan system based on temperature and humidity
- ✓ Heating based on temperature and humidity
- ✓ Misting based on time and humidity
- ✓ Air circulation based on time and humidity
- ✓ Screens and lighting based on time and light intensity.
- ✓ All climate zones are fitted with temperature, humidity, carbon dioxide and PAR sensors.

**Heating:** Gas Fired Boilers with main pumps, mixing valves and expansion tanks.

**Water:** Purified water reticulation system delivered through a circulatory loop. Water is stored in separate storage tanks.

**Misting:** High pressure fogging system

**Cooling:** High pressure fogging system and exhaust fans

**Ventilation:** HVAC air control system fitted with HEPA filters and vertical air movement fans

**Lighting:** Daylight supported with supplemental LED luminaires

**Nitrogen:** Single gas cylinder fitted with regulator.



## MADE FOR VOLUME & QUALITY

### Cultivation

We operate in accordance with strict Good Agricultural and Collection Practices (GACP) and complies with current Good Manufacturing Practices (cGMP) as guided by the International Council for Harmonisation (ICH Q7).

Our cannabis grow facility holds a fully automated aeroponic growing system that contains a fully automated 24-hour monitoring and control system. High air quality is delivered throughout the facility by the HEPA air filtration systems. The greenhouse is fully climate controlled and professionally designed to use the power of the African sun optimally. Supplementary lighting is provided in the grow facilities using fully dimmable and highly efficient LED luminaires which can be controlled centrally.

Our entire cGMP facility is ISO 7 certified. Airlocks are fitted into all cleanrooms to limit cross-contamination..



## **FAST FACTS ABOUT KYLAMI HOME OF BASSANI MEDICAL.**



Kyalami, a suburb of Midrand is situated between Pretoria and Johannesburg, forming part of the City of Johannesburg Metropolitan Municipality.



Depending on your starting point, Kyalami is only 21 – 32 km away from Johannesburg's OR Tambo International Airport - the busiest airport on the continent of Africa.



Midrand is the South African home to corporations such as PwC, Vodacom, Microsoft and Neotel, as well as a vast array of SME's.



Midrand is home to two key Government institutions – The National Credit Regulator and the South African Civil Aviation Authority.



Kyalami, an internationally renowned GP racetrack, is a Midrand landmark.



Most importantly, Kyalami is home to Bassani Medical, a world-class aeroponic facility for the manufacture of medical cannabis in South Africa.

## HOW WE DO THINGS



### Flower Process

**Seed & propagation** material. Bassani Medical's seeds are traceable and originate from plants that have been accurately identified in terms of genus, species, variety/cultivar/chemotype and origin.

Our seeds are feminised, genetics certified and sourced from leading suppliers.

**Our mother stock.** Bassani Medical guarantees healthy mother plants by selecting the best individual female plants which are free from pests and diseases. Good cultivation practices limit the ageing of our mother plants.

Adulteration is avoided by controlling the presence of varied species, varieties, or different plant parts during the entire production process.

**Cloning.** We take clippings from our Mother Plants and allow them to become independent healthy clones. The rooting process takes between 2-4 weeks.

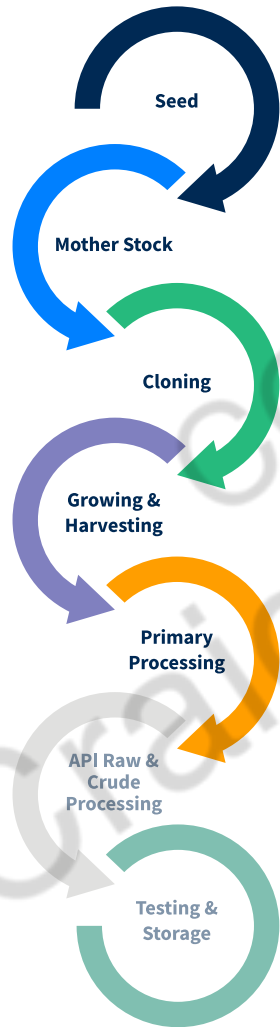
**Growing & harvesting.** Once the clones sprouted their own roots and leaves, they are transferred to the vegetation station. Our plants will start flowering after 8 weeks. Harvesting starts once the flowers have matured and have reached the best possible quality for the proposed use.

**Our primary processing** includes cutting, debugging, wet trimming and air-drying. All these processes conform to national and global regulations and are conducted as soon after harvesting as possible.

**Packaging** is done soonest to protect the product and to reduce the risk of pest attacks. Packaged dried medicinal plant substances, are stored in a secured, dry, well-aerated room, in which daily temperature fluctuations are limited and good aeration is ensured.

**Distribution** is done under strict security as per national regulations on transport.

# HOW WE DO THINGS



## API Process

**Seed & propagation** material. Bassani Medical's seeds are traceable and originate from plants that have been accurately identified in terms of genus, species, variety/cultivar/chemotype and origin.

Our seeds are feminised, genetics certified and sourced from leading suppliers.

**Our mother stock.** Bassani Medical guarantees healthy mother plants by selecting the best individual female plants which are free from pests and diseases. Good cultivation practices limit the ageing of our mother plants.

Adulteration is avoided by controlling the presence of varied species, varieties, or different plant parts during the entire production process.

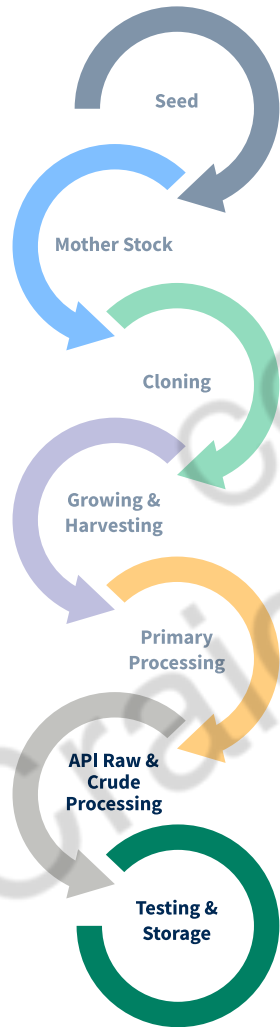
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**Our primary processing** includes cutting, debugging, wet trimming and air-drying. All these processes conform to national and global regulations and are conducted as soon after harvesting as possible. The flower will be processed strictly according to EU-cGMP conditions and procedures. The material will at this stage be transferred to Bassani Medical world class API processing facility.

Continues on next page

## HOW WE DO THINGS



### API Process Continued

**API Raw Processing** - The actives will be extracted from the flower using, recently patented technology to extract 100% of the crude API from the flower.

**Processing of Crude API.** The crude API will be transferred to our “best in its class” final processing area. Here the various Alkaloids (Natural API’s) will be separated using new Column Chromatography technology to ensure a 100% pure API.

**Testing and Storage** the API in its pure form will be tested according the USP and BP testing specifications and samples. Retained samples will be drawn for our Stability Studies Programme and test results will be recorded per our Drug Master Files.

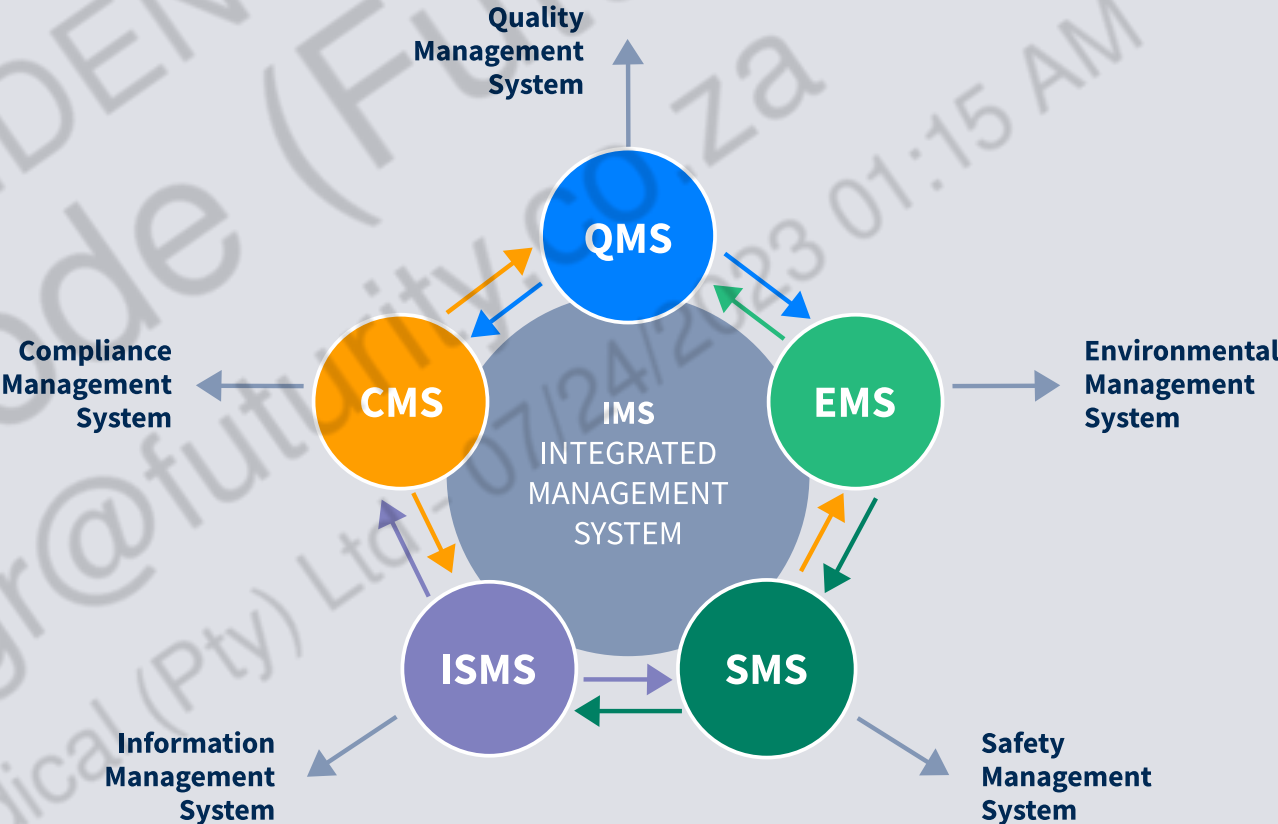
**Drug Master File Registration.** Bassani Medical will register its DMF’s in the US as carried out through drug master file process (type-1&2), while in EU, the registration will be done by filing of active substance master file (ASMF) for support of both our New Drug Application (NDA) and our Abbreviated New Drug Applications (ANDA) Partners.

**International Distribution** of Final API’s. Bassani Medical will utilize international partners in the US as well as Europe and the far East to distribute its API’s.

# EMPHASIS ON QUALITY, SAFETY & ENVIRONMENT

## Quality

Quality Assurance is built into every aspect of our operations. Our facility is built to meet the strictest pharmaceutical standards.



# EMPHASIS ON QUALITY, SAFETY & ENVIRONMENT

## Safety

We have appropriate Occupational Health, Safety and Environmental (OHSE) policies in place to ensure compliance to all South African OHSE legislation, regulations, and procedures.

Bassani Medical employs a fulltime Risk Manager supported by a team of Safety Representatives and other relevant personnel. We endeavour to ensure ongoing compliance and constant improvements relating to the provision and maintenance of safe and healthy working conditions.

## Environment

Bassani Medical recognises the need for environmental sustainability through our environmentally responsible facilities and infrastructure. We strive to prevent any harm to our neighbours through our operations and strive to protect our environment from adverse impact through comprehensive risk management programs and sustainable solutions.



### Green engineering & chemistry

Our products & processes are designed to eliminate toxic waste, and to reuse or recycle chemical waste.



### Water quality

We protect source water from exposure to contaminants and minimise consumption of water in our facility.



### Air quality

We achieve and maintain air quality standards and reduce the risk of toxic air pollutions.



### Resource integrity

We reduce adverse effects by minimising waste generation to prevent accidental release and future clean-up.



### Stressors

We reduce the effects by stressors, like pollutants and gas emissions, to the ecosystem.

## CONTACT US

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 [bassanimedical.com](http://bassanimedical.com)